

FORM PTO-1449

U.S. Dept. of Commerce  
Patent and Trademark Office

Atty Docket No.

P1726R1

Serial No.

09/483,588

## LIST OF DISCLOSURES CITED BY APPLICANT

(Use several sheets if necessary)

AUG 29 2000

Applicant

Presta, L.

Filing Date

14 Jan 2000

Group

1600

## FOREIGN PATENT DOCUMENTS

Examiner Initials	Document Number	Date	Country	Class	Subclass	Translation Yes No
gus	119 WO 99/51642	14.10.99	PCT			

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)

gus	120	Alastair et al., "Participation of the N-terminal region of Cepsilon3 in the binding of human IgE to its high-affinity receptor FcepsilonRI" <u>Biochemistry</u> (abstract only) 36:15568-15578 (1997)
gus	121	Medesan et al., "Comparative studies of rat IgG to further delineate the Fc:FcRN interaction site" <u>European Journal of Immunology</u> 28:2092-2100 (1998)

RECEIVED

SEP 20 2000

TECH CENTER 1600/2000

Examiner

David A. Saunders

Date Considered

7/11/02

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

USCOMM-DC 80-398.

FORM PTO-1449

U.S. Dept. of Commerce  
Patent and Trademark Office

Atty Docket No.

P1726R1

Serial No.

09/483,588

### LIST OF DISCLOSURES CITED BY APPLICANT

(Use several sheets if necessary)

DEC 26 2000

**Applicant**

Presta, L.

Filing Date

14 Jan 2000

Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

1615

1644

OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)

OTHER DISCLOSURES (including prior art, file, date, name, etc.)	
122	Armour et al., "Recombinant human IgG molecules lacking Fcγ receptor I binding and monocyte triggering activities" <u>European Journal of Immunology</u> 29(8):2613-2624 (Aug 1999)
	_____ "_____ for proteinase in experimental inflammation"

122 activities" European Journal of  
Jaakkola et al., "In vivo detection of vascular adhesion protein-1 in experimental inflammation"  
123 American Journal of Pathology 157(2):463-471 (Aug 2000)

RECEIVED

~~JAN 04 2001~~

**TECH CENTER 1600/2900**

Examiner

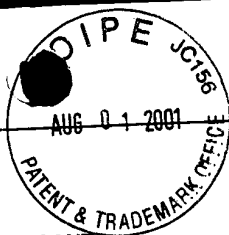
David A Saunders

Date Considered

7/11/02

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449

U.S. Dept. of Commerce  
Patent and Trademark Office

Atty Docket No.

P1726R1

Serial No.

09/483,588

Applicant

Presta, L.

Filing Date

14 Jan 2000

Group

1644

## LIST OF DISCLOSURES CITED BY APPLICANT

(Use several sheets if necessary)

## U.S. PATENT DOCUMENTS

Examiner Initials	Document Number	Date	Name	Class	Subclass	Filing Date
<i>DS</i>	124	6,194,551 B1	27.02.01	Idusogie et al.		

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)

<i>DS</i>	125	Burton et al., "Molecular recognition of antibody (IgG) by cellular Fc receptor (FcRI)" <u>Molecular Immunology</u> 25(11):1175-1181 (1988)
	126	Capon et al., "Designing CD4 Immunoadhesins for AIDS Therapy" <u>Nature</u> 337:525-531 (1989)
	127	Chappel et al., "Identification of Secondary FcγRI Binding Site within a Genetically Engineered Human IgG Antibody" <u>Journal of Biological Chemistry</u> 268:25124-25131 (1993)
	128	Guddat et al., "Three-dimensional structure of a human immunoglobulin with a hinge deletion" <u>PNAS (USA)</u> 90:4271-4275 (1993)
	129	Haagen et al., "Interaction of Human Monocyte Fcγ Receptors with Rat IgG2b: A New Indicator for the FcγRIIIa (R-H131) Polymorphism" <u>J. Immunol.</u> 154:1852-1860 (1995)
	130	Harris et al., "Crystallographic Structure of an Intact IgG1 Monoclonal Antibody" <u>Journal of Molecular Biology</u> 275:861-872 (1998)
	131	Harris et al., "Refined Structure of an Intact IgG2a Monoclonal Antibody" <u>Biochemistry</u> 36:1581-1597 (1997)
	132	Hulett et al., "Chimeric Fc Receptors Identify Functional Domains of the Murine High Affinity Receptors for IgG" <u>J. Immunol.</u> 147:1863-1868 (1991)
	133	Janeway et al. <u>Immunobiology, The Immune System in Health and Disease</u> , CB Ltd and Garland Publishing Inc., NY & London pps. 3:29-3:30 (1994)
	134	Koene et al., "FcγRIIIa-158V/F Polymorphism Influences the Binding of the IgG by Natural Killer Cell FcγRIIIa, Independently of the FcγRIIIa-48L/R/H Phenotype" <u>Blood</u> 90(3):1109-1114 (1997)
	135	Lehrnbecher et al., "Variant genotypes of FcγRIIIA influence the development of Kaposi's sarcoma in HIV-infected men" <u>Blood</u> 95(7):2386-2390 (2000)
	136	Lifely et al., "Glycosylation and biological activity of CAMPATH-1H expressed in different cell lines and grown under different culture conditions" <u>Glycobiology</u> 5(8):813-822 (Dec 1995)
	137	Lucas et al., "High-level production of recombinant proteins in CHO cells using a dicistronic DHFR intron expression vector" <u>Nucleic Acids Research</u> 24(9):1774-1779 (1996)
	138	Lund et al., "Multiple Interactions of the IgG with Its Core Oligosaccharide Can Modulate Recognition by Complement and Human Fcγ Receptor I and Influence the Synthesis of Its Oligosaccharide Chains" <u>J. Immunol.</u> 157:4963-4969 (1996)
	139	Lund et al., "Oligosaccharide-protein interactions in IgG can modulate recognition by Fcγ receptors" <u>FASEB Journal</u> 9:115-119 (1995)
	140	Meng et al., "Green fluorescent protein as a second selectable marker for selection of high producing clones from transfected CHO cells" <u>Gene</u> 242:201-207 (2000)
	141	Miller et al., "A Novel Role for the Fc Receptor γ Subunit: Enhancement of the FcγR Ligand Affinity" <u>Journal of Experimental Medicine</u> 183:2227-2233 (1996)
	142	Nieto et al., "Involvement of the Fcγ receptor IIIA genotypes in susceptibility to rheumatoid arthritis" <u>Arthritis and Rheumatism</u> 43(4):735-739 (2000)

Examiner

*David A. Saunders*

Date Considered

*7/11/02*

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

USCOMM-DC 80-398.

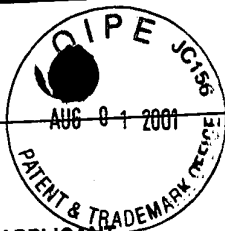
RECEIVED

TECH CENTER 1600/2900

AUG 06 2001

Attorney  
Papers #10

Sheet 1 of 2



FORM PTO-1449

U.S. Dept. of Commerce  
Patent and Trademark Office

Atty Docket No.

P1726R1

Serial No.

09/483,588

Applicant

Presta, L.

Filing Date

14 Jan 2000

Group

1644

## LIST OF DISCLOSURES CITED BY APPLICANT

(Use several sheets if necessary)

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)

- 143 Papac et al., "A high-throughput microscale method to release N-linked oligosaccharide from glycoproteins for matrix-assisted laser desorption/ionization time-of-flight mass spectrometric analysis" Glycobiology 8(5):463-472 (1998) ✓
- 144 Papac et al., "Analysis of Acidic Oligosaccharides and Glycopeptides by Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry" Anal. Chem. 68:3215-3223 (1996) ✓
- 145 Porges et al., "Novel Fcγ Receptor I Family Gene Products in Human Mononuclear Cells" J. Clin. Invest. 90:2102-2109 (1992) ✓
- 146 Raghavan and Bjorkman, "Fc Receptors and their Interactions with Immunoglobulins" Annu. Rev. Cell. Dev. Biol. 12:181-220 (1996) ✓
- 147 Sondermann et al., "Crystal structure of the soluble form of the human Fcγ-receptor IIb: a new member of the immunoglobulin superfamily at 1.7 Å resolution" EMBO Journal 18(5):1095-1103 (1999) ✓
- 148 Sondermann et al., "The 32-Å crystal structure of the human IgG1 Fc Fragment-FcγRIII complex" Nature 406:267-273 (2000) ✓
- 149 Umana et al., "Engineered glycoforms of an antineuroblastoma IgG1 with optimized antibody-dependent cellular cytotoxic activity" Nature Biotechnology 17:176-180 (1999) ✓

Examiner

*David A. Lawrence*

Date Considered

7/11/02

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



FORM PTO-1449

U.S. Dept. of Commerce  
Patent and Trademark Office

Atty Docket No. P1726R1	Serial No. 09/483,588
Applicant Presta, L.	
Filing Date 14 Jan 2000	Group 1644

**LIST OF DISCLOSURES CITED BY APPLICANT**  
(Use several sheets if necessary)

**U.S. PATENT DOCUMENTS**

Examiner Initials		Document Number	Date	Name	Class	Subclass	Filing Date
<i>DSW</i> <i>DSW</i>	150	6,165,745	26.12.00	Ward et al.	11	111	
	151	6,277,375	21.08.01	Ward, E.			

**FOREIGN PATENT DOCUMENTS**

Examiner Initials		Document Number	Date	Country	Class	Subclass	Translation Yes	Translation No
<i>DSW</i> <i>DSW</i>	152	WO 93/22332	11.11.93	PCT	11	111		
	153	WO 97/34631	25.09.97	PCT				

TECH CENTER 1600/2900

DEC 3 2001

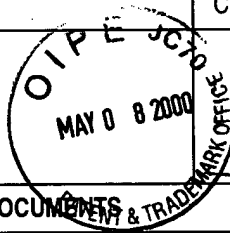
RECEIVED

Examiner <i>David A. Anderson</i>	Date Considered <i>7/11/02</i>
*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

<b>FORM PTO-1449</b>  <b>LIST OF DISCLOSURES CITED BY APPLICANT</b> (Use several sheets if necessary)	U.S. Dept. of Commerce Patent and Trademark Office	Atty Docket No. P1726R1	Serial No. 09/483,588
		Applicant Presta, L.	
		Filing Date 14 Jan 2000	Group 1644

**U.S. PATENT DOCUMENTS**

Examiner Initials	Document Number	Date	Name	Class	Subclass	Filing Date
<div style="font-size: 2em; transform: rotate(-90deg); position: absolute; left: -40px; top: 50px;">             2000              1           </div> R	1	5,624,821	29.04.97	Winter et al.		
	2	5,648,260	15.07.97	Winter et al.		
	3	5,736,137	07.04.98	Anderson et al.		
	4	5,985,599	16.11.99	McKenzie et al.		



**FOREIGN PATENT DOCUMENTS**

Examiner Initials	Document Number	Date	Country	Class	Subclass	Translation Yes	Translation No
<div style="font-size: 2em; transform: rotate(-90deg); position: absolute; left: -40px; top: 50px;">             2000              1           </div> R	5	WO 00/09560	24.02.00	PCT			
	6	WO 94/29351	22.12.94	PCT			
	7	WO 97/44362	27.11.97	PCT			
	8	WO 98/52975	26.11.98	PCT			

**OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)**

	9	Bolland et al., "SHIP modulates immune receptor responses by regulating membrane association of Btk" <u>Immunity</u> 8(4):509-516 (Apr 1998)				
	10	Brekke et al., "Human IgG isotype-specific amino acid residues affecting complement-mediated cell lysis and phagocytosis" <u>European Journal of Immunology</u> 24(10):2542-2547 (Oct 1994)				
	11	Burmeister et al., "Crystal structure of the complex of rat neonatal Fc receptor with Fc" <u>Nature</u> 372(6504):379-383 (Nov 24, 1994)				
	12	Burton and Woof, "Human Antibody Effector Function" <u>Advances in Immunology</u> 51:1-84 (1992)				
	13	Burton et al., "The Clq receptor site on immunoglobulin G" <u>Nature</u> 288(5789):338-344 (Nov 27, 1980)				
	14	Burton, "Immunoglobulin G: Functional Sites" <u>Molecular Immunology</u> 22(3):161-206 (1985)				
	15	Canfield and Morrison, "The binding affinity of human IgG for its high affinity Fc receptor is determined by multiple amino acids in the CH2 domain and is modulated by the hinge region" <u>Journal of Experimental Medicine</u> 173(6):1483-1491 (Jun 1, 1991)				
	16	Carter et al., "Humanization of an anti-p185HER2 antibody for human cancer therapy" <u>Proc. Natl. Acad. Sci.</u> 89:4285-4289 (May 1992)				
	17	Chappel et al., "Identification of the Fcγ receptor class I binding site in human IgG through the use of recombinant IgG1/IgG2 hybrid and point-mutated antibodies" <u>Proc. Natl. Acad. Sci. USA</u> 88(20):9036-9040 (Oct 15, 1991)				
	18	Clynes and Ravetch, "Cytotoxic antibodies trigger inflammation through Fc receptors" <u>Immunity</u> 3(1):21-26 (Jul 1995)				
	19	Clynes et al., "Fc receptors are required in passive and active immunity to melanoma" <u>Proc. Natl. Acad. Sci. USA</u> 95(2):652-656 (Jan 20, 1998)				
	20	Clynes et al., "Modulation of immune complex-induced inflammation in vivo by the coordinate expression of activation and inhibitory Fc receptors" <u>Journal of Experimental Medicine</u> 189(1):179-185 (Jan 4, 1999)				
	21	Clynes et al., "Uncoupling of immune complex formation and kidney damage in autoimmune glomerulonephritis" <u>Science</u> 279(5353):1052-1054 (Feb 13, 1998)				

Examiner: <i>[Signature]</i>	Date Considered:
------------------------------	------------------

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

*David A. Lawrence*

8/22/02

FORM PTO-1449

U.S. Dept. of Commerce  
Patent and Trademark Office

Atty Docket No.

P1726R1

Serial No.

09/483,588

## LIST OF DISCLOSURES CITED BY APPLICANT

(Use several sheets if necessary)

Applicant

Presta, L.

Filing Date

14 Jan 2000

Group

1644

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)

- 22 Daeron, M., "Fc Receptor Biology" Annual Review of Immunology 15:203-234 (1997)
- 23 Deisenhofer, "Crystallographic Refinement and Atomic Models of a Human Fc fragment and Its Complex with Fragment B of Protein A from Staphylococcus aureus at 2.9- and 2.8-A Resolution" Biochemistry 20(9):2361-2370 (1981)
- 24 Duncan and Winter, "The binding site for Clq on IgG" Nature 332:738-740 (Apr 21, 1988)
- 25 Duncan et al., "Localization of the binding site for the human high-affinity FC receptor on IgG" Nature 332:563-564 (April 7, 1988)
- 26 Gazzano-Santoro et al., "A non-radioactive complement-dependent cytotoxicity assay for anti-CD20 monoclonal antibody" Journal of Immunological Methods 202:163-171 (1997)
- 27 Gergely et al., "Fc receptors on lymphocytes and K cells" Biochemical Transactions 12(5):739-743 (Oct 1984)
- 28 Ghetie and Ward, "FcRn: the MHC class I-related receptor that is more than an IgG transporter" Immunology Today 18(12):592-598 (Dec 1997)
- 29 Ghetie et al., "Abnormally short serum half-lives of IgG in  $\beta$ 2-microglobulin-deficient mice" European Journal of Immunology 26(3):690-696 (Mar 1996)
- 30 Ghetie et al., "Increasing the serum persistence of an IgG fragment by random mutagenesis" Nature Biotechnology 15(7):637-640 (Jul 1997)
- 31 Gorman et al., "Transient Production of Proteins Using an Adenovirus Transformed Cell Line" DNA Prot. Eng. Tech. 2(1):3-10 (1990)
- 32 Graham et al., "Characteristics of a Human Cell Line Transformed by DNA from Human Adenovirus Type 5" J. Gen. Virol. 36:59-72 (1977)
- 33 Greenwood et al., "Structural motifs involved in human IgG antibody effector functions" European Journal of Immunology 23(5):1098-1104 (May 1993)
- 34 Hadley et al., "The functional activity of Fc $\gamma$ RII and Fc $\gamma$ RIII on subsets of human lymphocytes" Immunology 76(3):446-451 (Jul 1992)
- 35 Hatta et al., "Association of Fc $\gamma$  receptor IIIB, but not of Fc $\gamma$  receptor IIA and IIIB, polymorphisms with systemic lupus erythematosus in Japanese" Genes and Immunity 1:53-60 (1999)
- 36 Heiken et al., "T lymphocyte development in the absence of Fc $\epsilon$  receptor  $\gamma$  subunit: analysis of thymic-dependent and independent  $\alpha\beta$  and  $\gamma\delta$  pathways" European Journal of Immunology 26(8):1935-1943 (Aug 1996)
- \*37 ~~Kabat Sequences of Proteins of Immunological Interest, US Dept of Health and Human Services, NIH, 5th edition, Bethesda, MD (1991)~~
- 38 Kim et al., "Catabolism of the Murine IgG1 Molecule: Evidence That Both CH2-CH3 Domain Interfaces are Required for Persistence of IgG1 in the Circulation of Mice" Scandinavian Journal Of Immunology 40(4):457-465 (1994)
- 39 Kim et al., "Identifying amino acid residues that influence plasma clearance of murine IgG1 fragments by site-directed mutagenesis" European Journal of Immunology 24:542-548 (1994)
- 40 Kim et al., "Inhibition of Vascular Endothelial Growth Factor-Induced Angiogenesis Suppresses Tumour Growth in vivo" Nature 362:841-844 (1993)
- 41 Kim et al., "Localization of the site of the murine IgG1 molecule that is involved in binding to the murine intestinal Fc receptor" European Journal of Immunology 24:2429-2434 (1994)

Examiner

Date Considered

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

David A. Lawrence

6/22/02

USCOMM-DC 80-398.

FORM PTO-1449

U.S. Dept. of Commerce  
Patent and Trademark Office

Atty Docket No.

P1726R1

Serial No.

09/483,588

## LIST OF DISCLOSURES CITED BY APPLICANT

(Use several sheets if necessary)

Applicant

Presta, L.

Filing Date

14 Jan 2000

Group

16414

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)

- 42 Kim et al., "The Vascular Endothelial Growth Factor Proteins: Identification of Biologically Relevant Regions by Neutralizing Monoclonal Antibodies" Growth Factors 7(1):53-64 (1992)
- 43 Kunkel, T., "Rapid and Efficient Site-Specific Mutagenesis Without Phenotypic Selection" Proc. Natl. Acad. Sci. 82:488-492 (1985)
- 44 Lehrnbecher et al., "Variant genotypes of the low-affinity Fcγ receptors in two control populations and a review of low-affinity Fcγ receptor polymorphisms in control and disease populations" Blood 94(12):4220-4232 (Dec 15, 1999)
- 45 Li et al., "Reconstitution of human FcγRIII cell type specificity in transgenic mice" Journal of Experimental Medicine 183(3):1259-1263 (Mar 1, 1996)
- 46 Lorenz et al., "Strong association between the responder status of the FcγRIII receptor and recurrent spontaneous abortion" European Journal of Immunogenetics 22(5):397-401 (Oct 1995)
- 47 Lund et al., "Multiple binding sites on the CH2 domain of IgG for mouse FcγRII" Molecular Immunology 29(1):53-59 (Jan 1992)
- 48 Medesan et al., "Delineation of the amino acid residues involved in transcytosis and catabolism of mouse IgG1" Journal of Immunology 158(5):2211-2217 (Mar 1, 1997)
- 49 Medesan et al., "Localization of the site of the IgG molecule that regulates maternofetal transmission in mice" European Journal of Immunology 26(10):2533-2536 (Oct 1996)
- 50 Morrison et al., "Structural Determinants of Human IgG Function" Immunologist 2:119-124 (1994)
- 51 Okada et al., "Cutting Edge: Role of the inositol phosphatase SHIP in B cell receptor-induced Ca<sup>2+</sup> oscillatory response" Journal of Immunology 161(10):5129-5132 (Nov 15, 1998)
- 52 Ono et al., "Deletion of SHIP or SHP-1 reveals two distinct pathways for inhibitory signaling" Cell 90(2):293-301 (Jul 25, 1997)
- 53 Ono et al., "Role of the inositol phosphatase SHIP in negative regulation of the immune system by the receptor FcγRIIB" Nature 383(6597):263-266 (Sep 19, 1996)
- 54 Popov et al., "The stoichiometry and affinity of the interaction of murine Fc fragments with the MHC class I-related receptor, FcRn" Molecular Immunology 33(6):521-530 (Apr 1996)
- 55 Presta et al., "Humanization of an Anti-Vascular Endothelial Growth Factor Monoclonal Antibody for the Therapy of Solid Tumors and Other Disorders" Cancer Research 57(20):4593-4599 (Oct 15, 1997)
- 56 Raghavan et al., "Analysis of the pH dependence of the neonatal Fc receptor/immunoglobulin G interaction using antibody and receptor variants" Biochemistry 34(45):14649-14657 (Nov 14, 1995)
- 57 Ravetch and Clynes, "Divergent roles for Fc receptors and complement in vivo" Annual Review of Immunology 16:421-432 (1998)
- 58 Ravetch and Kinet, "Fc Receptors" Annual Review of Immunology 9:457-492 (1991)
- 59 Ravetch, J., "Fc receptors" Current Opinion in Immunology 9(1):121-125 (Feb 1997)
- 60 Ravetch, J., "Fc receptors: rubor redux" Cell 78(4):553-560 (Aug 26, 1994)
- 61 Reff et al., "Depletion of B cells in vivo by a chimeric mouse human monoclonal antibody to CD20" Blood 83(2):435-445 (Jan 15, 1994)

Examiner

Date Considered

6/18/01

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

David A. Saunders

8/22/02 USCOMM-DC 80-398.



FORM PTO-1449

U.S. Dept. of Commerce  
Patent and Trademark Office

Atty Docket No.

P1726R1

Serial No.

09/483,588

## LIST OF DISCLOSURES CITED BY APPLICANT

(Use several sheets if necessary)

Applicant

Presta, L.

Filing Date

14 Jan 2000

Group

1644

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)

- 62 Sarmay et al., "Ligand inhibition studies on the role of Fc receptors in antibody-dependent cell-mediated cytotoxicity" Molecular Immunology 21(1):43-51 (Jan 1984)
- 63 Shores et al., "T cell development in mice lacking all T cell receptor  $\zeta$  family members ( $\zeta$ ,  $\eta$ , and Fc $\epsilon$ RI $\gamma$ )" Journal of Experimental Medicine 187(7):1093-1101 (Apr 6, 1998)
- 64 Suzuki et al., "Distinct contribution of Fc receptors and angiotensin II-dependent pathways in anti-GBM glomerulonephritis" Kidney International 54(4):1166-1174 (Oct 1998)
- 65 Sylvestre and Ravetch, "A dominant role for mast cell Fc receptors in the Arthus reaction" Immunity 5(4):387-390 (Oct 1996)
- 66 Sylvestre and Ravetch, "Fc receptors initiate the Arthus reaction: redefining the inflammatory cascade" Science 265(5175):1095-1098 (Aug 19, 1994)
- 67 Sylvestre et al., "Immunoglobulin G-mediated inflammatory responses develop normally in complement-deficient mice" Journal of Experimental Medicine 184(12):2385-2392 (Dec 1, 1996)
- 68 Takai et al., "Augmented humoral and anaphylactic responses in Fc $\gamma$ RII-deficient mice" Nature 379(6563):346-349 (Jan 25, 1996)
- 69 Takai et al., "Fc $\gamma$  chain deletion results in pleiotropic effector cell defects" Cell 76(3):519-529 (Feb 11, 1994)
- 70 Tao et al., "Structural features of human immunoglobulin G that define isotype-specific differences in complement activation" Journal of Experimental Medicine 178(2):661-667 (Aug 1, 1993)
- 71 Ting et al., "Fc $\gamma$  receptor activation induces the tyrosine phosphorylation of both phospholipase C (PLC)- $\gamma$ 1 and PLC- $\gamma$ 2 in natural killer cells" Journal of Experimental Medicine 176(6):1751-1755 (Dec 1, 1992)
- 72 Vance et al., "Binding of monomeric human IgG defines an expression polymorphism of Fc $\gamma$ RIII on large granular lymphocyte/natural killer cells" Journal of Immunology 151(11):6429-6439 (Dec 1, 1993)
- 73 Ward and Ghetie, "The effector functions of immunoglobulins: implications for therapy" Therapeutic Immunology 2(2):77-94 (Apr 1995)
- 74 Weng et al., "Computational determination of the structure of rat Fc bound to the neonatal Fc receptor" Journal of Molecular Biology 282(2):217-225 (Sep 18, 1998)
- 75 Werther et al., "Humanization of an Anti-Lymphocyte Function-Associated Antigen (LFA)-1 Monoclonal Antibody and Reengineering of the Humanized Antibody for Binding to Rhesus LFA-1" J. of Immunology 157:4986-4995 (1996)
- 76 Woolf et al., "Localisation of the monocyte-binding region on human immunoglobulin G" Molecular Immunology 23(3):319-330 (Mar 1986)
- 77 Wu et al., "A novel polymorphism of Fc $\gamma$ RIIIa (CD16) alters receptor function and predisposes to autoimmune disease" Journal of Clinical Investigation 100(5):1059-1070 (Sep 1, 1997)
- 78 Xu et al., "The N-terminal sequence of the CH2 domain controls the differential ability of human IgG1 and IgG2 to activate complement" Journal of Immunology (abstract no. 862) 150(8):152A (Apr 15, 1993)
- 79 Yap et al., "Human Fc gamma receptor IIA (Fc $\gamma$ RIIA) genotyping and association with systemic lupus erythematosus (SLE) in Chinese and Malays in Malaysia" Lupus 8(4):305-310 (1999)
- 80 Yuan et al., "Antibody-mediated modulation of Cryptococcus neoformans infection is dependent on distinct Fc receptor functions and IgG subclasses" Journal of Experimental Medicine 187(4):641-648 (Feb 16, 1998)

Examiner

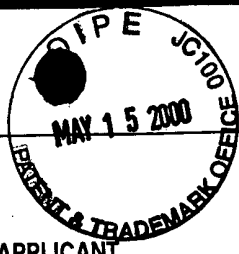
Date Considered

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

David A. Bender

8/24/02

USCOMM-DC 80-398.



attach Paper 5 1/2  
Sheet 1 of 2

FORM PTO-1449

U.S. Dept. of Commerce  
Patent and Trademark Office

Atty Docket No.  
P1726R1

Serial No.  
09/483,588

**LIST OF DISCLOSURES CITED BY APPLICANT**

(Use several sheets if necessary)

Applicant  
Presta, L.

Filing Date  
14 Jan 2000

Group  
1244

**U.S. PATENT DOCUMENTS**

Examiner Initials	Document Number	Date	Name	Class	Subclass	Filing Date
SW	81 4,752,601	21.06.88	Hahn	—	—	
	82 5,348,876	20.09.94	Michaelson et al.	—	—	
	83 5,698,449	16.12.97	Baumann et al.	—	—	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials	Document Number	Date	Country	Class	Subclass	Translation Yes	No
SW	84 WO 88/07089	22.09.88	PCT	—	—		
	85 WO 97/28267	07.08.97	PCT	—	—		
	86 WO 98/23289 ✓	04.06.98	PCT	—	—		
	87 WO 99/43713	02.09.99	PCT	—	—		
	88 WO 99/58572	18.11.99	PCT	—	—		

**OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)**

SW	89	Allan and Isliker, "Studies on the complement-binding site of rabbit immunoglobulin G-I. Modification of tryptophan residues and their role in anticomplementary activity of rabbit IgG" <u>Immunochimistry</u> 11(4):175-180 (Apr 1974)
	90	Angal et al., "A single amino acid substitution abolishes the heterogeneity of chimeric mouse/human (IgG4) antibody" <u>Molecular Immunology</u> 30(1):105-108 (Jan 1993)
	91	Bloom et al., "Intrachain disulfide bond in the core hinge region of human IgG4" <u>Protein Science</u> 6:407-415 (1997)
	92	Bredius et al., "Role of neutrophil FcγRIIa (CD32) and FcγRIIb (CD16) polymorphic forms in phagocytosis of human IgG1- and IgG3-opsonized bacteria and erythrocytes" <u>Immunology</u> 83(4):624-630 (Dec 1994)
	93	Capel et al., "Heterogeneity of Human IgG Fc Receptors" <u>Immunomethods</u> 4:25-34 (1994)
	94	Cosimi, "Clinical Development of ORTHOCLONE OKT3" <u>Transplantation Proceedings</u> (Suppl 1) XIX(2):7-16 (Apr 1987)
	95	de Haas et al., "Fcγ receptors of phagocytes" <u>J. of Laboratory Clinical Medicine</u> 126:330-341 (1995)
	96	Ghebrehwet et al., "Isolation, cDNA cloning, and overexpression of a 33-kD cell surface glycoprotein that binds to the globular "heads" of C1q" <u>Journal of Experimental Medicine</u> 179(6):1809-1821 (Jun 1, 1994)
	97	Greenwood et al., "Engineering multiple-domain forms of the therapeutic antibody CAMPATH-1H: effects on complement lysis" <u>Therapeutic Immunology</u> 1(5):247-255 (Oct 1994)
	98	Hogarth et al., "Characterization of FcR Ig-binding sites and epitope mapping" <u>Immunomethods</u> 4(1):17-24 (Feb 1994)
	99	Huizinga et al., "Binding Characteristics of Dimeric IgG Subclass Complexes to Human Neutrophils" <u>Journal of Immunology</u> 142:2359-2364 (1989)
	100	Jefferis et al., "Molecular Definition of Interaction Sites on Human IgG for Fc Receptors (huFcγR)" <u>Molecular Immunology</u> 27(12):1237-1240 (1990)
	101	Kabat, E. et al. <u>Sequences of Proteins of Immunological Interest</u> (pgs. 669, 671, 687, 696), 5th edition, Bethesda, MD:NIH Vol. 1 (1991)

Examiner

Daniel A. Saunders

Date Considered

8/22/02

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449

U.S. Dept. of Commerce  
Patent and Trademark Office

Atty Docket No.

P1726R1

Serial No.

09/483,588

Applicant

Presta, L.

Filing Date

14 Jan 2000

Group

## LIST OF DISCLOSURES CITED BY APPLICANT

(Use several sheets if necessary)

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)

102	Lauvrak et al., "Identification and characterisation of Clq-binding phage displayed peptides" <u>Biological Chemistry</u> 378(12):1509-1519 (Dec 1997)
103	Lund et al., "Human FcγRI and FcγRII interact with distinct but overlapping sites on human IgG" <u>Journal of Immunology</u> 147(8):2657-2662 (Oct 15, 1991)
104	Morgan et al., "The N-terminal end of the CH2 domain of chimeric human IgG1 anti-HLA-DR is necessary for Clq, FcγRI and FcγRIII binding" <u>Immunology</u> 86(2):319-324 (Oct 1995)
105	Nagarajan et al., "Ligand binding and phagocytosis by CD16 (Fc γ receptor III) isoforms. Phagocytic signaling by associated ζ and γ subunits in Chinese hamster ovary cells" <u>Journal of Biological Chemistry</u> 270(43):25762-25770 (Oct 27, 1995)
106	Ngo et al., "Computational Complexity, Protein Structure Prediction, and the Levinthal Paradox" <u>The Protein Folding Problem and Tertiary Structure Prediction</u> , Merz & Le Grand, Boston: Birkhauser pps. 491-495 (1994)
107	Sarmay et al., "Mapping and comparison of the interaction sites on the Fc region of IgG responsible for triggering antibody dependent cellular cytotoxicity (ADCC) through different types of human Fcγ receptor" <u>Molecular Immunology</u> 29(5):633-639 (May 1992)
108	Sensel et al., "Amino acid differences in the N-terminus of CH2 influence the relative abilities of IgG2 and IgG3 to activate complement" <u>Molecular Immunology</u> 34(14):1019-1029 (Oct 1997)
109	Strohmeier et al., "Neutrophil functional responses depend on immune complex valency" <u>Journal of Leukocyte Biology</u> 58(4):403-414 (Oct 1995)
110	Strohmeier et al., "Role of the FcγR subclasses FcγRII and FcγRIII in the activation of human neutrophils by low and high valency immune complexes" <u>Journal of Leukocyte Biology</u> 58(4):415-422 (Oct 1995)
111	Tamm et al., "The IgG binding site of human FcγRIIIB receptor involves CC' and FG loops of the membrane-proximal domain" <u>Journal of Biological Chemistry</u> 271(7):3659-3666 (Feb 16, 1996)
112	Tao et al., "Studies of aglycosylated chimeric mouse-human IgG. Role of Carbohydrate in the Structure and Effector Functions Mediated by the Human IgG Constant Region" <u>Journal of Immunology</u> 143(8):2595-2601 (Oct 15, 1989)
113	Tao et al., "The differential ability of human IgG1 and IgG4 to activate complement is determined by the COOH-terminal sequence of the CH2 domain" <u>Journal of Experimental Medicine</u> 173(4):1025-1028 (Apr 1991)
114	Tax et al., "Fc receptors for mouse IgG1 on human monocytes: polymorphism and role in antibody-induced T cell proliferation" <u>Journal of Immunology</u> 133(3):1185-1189 (Sep 1984)
115	Urfer et al., "High resolution mapping of the binding site of TrkA for nerve growth factor and TrkC for neurotrophin-3 on the second immunoglobulin-like domain of the Trk receptors" <u>Journal of Biological Chemistry</u> 273(10):5829-5840 (Mar 6, 1998)
116	Van de Winkel and Anderson, "Biology of human immunoglobulin G Fc receptors" <u>Journal of Leukocyte Biology</u> 49(5):511-524 (May 1991)
117	Warmerdam et al., "A single amino acid in the second Ig-like domain of the human Fcγ receptor II is critical for human IgG2 binding" <u>Journal of Immunology</u> 147(4):1338-1343 (Aug 15, 1991)
118	Wright and Morrison, "Effect of altered CH2-associated carbohydrate structure on the functional properties and in vivo fate of chimeric mouse-human immunoglobulin G1" <u>Journal of Experimental Medicine</u> 180(3):1087-1096 (Sep 1, 1994)

Examiner

David A. Saunders

Date Considered

8/22/02

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Sheet 1 of 1

U.S. Dept. of Commerce  
Patent and Trademark Office

P1726R1

09/483,588

(Use several sheets if necessary)

Presta, L.

14 Jan 2000

1644

Examiner Initials		Document Number	Date	Name	Class	Subclass	Filing Date
<i>[Signature]</i>	154	2002/0098193	25.07.02	Ward, E:	<del>1</del>	<del>1</del>	

155	Maxwell et al., "Crystal structure of the human leukocyte Fc receptor, FcγRIIa" <u>Nature Structural Biology</u> 6(5):437-442 (May 1999)
-----	--

RECEIVED

AUG 28 2002

TECH CENTER 1600/2900

David A. Lawrence

Date Considered

8/24/02

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.